

## STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0122611; AI 140049; PER20060001** to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I. THE APPLICANT IS:** Tangipahoa Parish Sewerage District No. 1  
Bedico Regional Sewage Treatment Facility  
15481 Club Deluxe Road  
Hammond, LA 70403
- II. PREPARED BY:** Angela Marse
- DATE PREPARED:** July 30, 2007
- III. PERMIT ACTION:** LPDES permit LA0122611, AI 140049; PER20060001
- LPDES application received: May 19, 2006
- LPDES permit issued: none issued

**IV. FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving Bedico Meadows Subdivision and surrounding areas. (The application was submitted by Bedico Meadows, LLC., the developer. However, the plant has been donated to Tangipahoa Parish Sewerage District No. 1.)
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located off Snowball Circle in Bedico Meadows Subdivision (off La. Hwy. 1085), Tangipahoa Parish.
- D. The treatment facility consists of an aerated lagoon followed by a clarifier, diffused air basin, anoxic basin, reaeration and man-made wetland. Disinfection is by chlorination.
- E. Outfall 001

Discharge Location: Latitude 30° 27' 33" North  
Longitude 90° 14' 39" West

Description: treated sanitary wastewater

Design Capacity: 0.240 MGD

This is a new facility. It will serve Bedico Meadows Subdivision and surrounding areas. It is being planned as a regional sewerage treatment facility. Please note that if the facility grows to a discharge beyond the design capacity of the facility, additional sewage treatment may be required with prior approval of the facility's plans to the Louisiana Department of Health and Hospitals. Notification must be submitted to the LDEQ; a permit modification may be required.

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Type of Flow Measurement which the facility is currently using: V-Notch Weir\*

\*A continuous recorder is required for facilities of this size.

**V. RECEIVING WATERS:**

The discharge is into an unnamed ditch, thence into East Bedico Creek, thence into the Tangipahoa River in segment 040702 of the Lake Ponchartrain Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 040702 of the Lake Ponchartrain Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Full	Full	Not Supported	N/A	N/A	N/A	N/A

<sup>1/</sup>The designated uses and degree of support for Segment 040702 of the Lake Ponchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Section 303 (d) of the Clean Water Act as amended by the Water Quality Act of 1987, and EPA's regulations at 40 CFR 130 require that each state identify those waters within its boundaries not meeting water quality standards. The Clean Water Act further requires states to implement plans to address impairments. LDEQ is developing Total Maximum Daily Loadings Studies (TMDLs) to address impaired waterbodies. Segment 040702 of the Lake Ponchartrain Basin is on the 2004 Integrated 303(d) List of Impaired Waterbodies. The suspected causes of impairment are mercury, ammonia (EPA- Category 5), nutrients (EPA – Category 5), and dissolved oxygen (EPA - Category 5). To date no TMDLs have been completed for this waterbody.

Suspected causes of concern are addressed in a manner consistent with the Department's permitting guidance for implementing Louisiana's surface water quality standards as follows:

**Dissolved oxygen**

Monitoring for BOD<sub>5</sub> is the best indicator by which to measure the potential discharge of oxygen consuming pollutants at levels that will result in dissolved oxygen below that of state water quality standards. Therefore, to protect against potential discharges resulting in DO levels below that of state water quality standards for the receiving waterbody, CBOD<sub>5</sub> limits have been placed in the permit.

**Ammonia and nutrients**

Ammonia and phosphorus are considered nutrients. Nutrients consume dissolved oxygen in the receiving stream making less available for aquatic life. Monitoring for ammonia nitrogen is an indicator by which to monitor for the potential presence of nutrients remaining in a waste stream after the nitrification process has taken place. To protect against the discharge of nutrients into the receiving waterbody at levels which exceed state water quality standards, ammonia nitrogen limits have been placed in the permit.

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**Mercury**

The mercury impairment for subsegment 040702 applies only to those waterbodies specifically identified in LDEQ's Final 2004 Integrated Report, not to the entire subsegment. Because the discharge from this facility is not directly into the Tangipahoa River, mercury will not be addressed in this permit development. However, proposed TMDL Studies may require a mercury limit in future permits.

**VI. ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 040702 of the Lake Ponchartrain Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered species or candidate species or their critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

**VII. HISTORIC SITES:**

The discharge will be from a new facility. LDEQ has consulted with the State Historic Preservation Officer (SHPO) in a letter dated February 7, 2007 to determine whether construction-related activities could potentially affect sites or properties on or eligible for listing on the National Register of Historic Places. SHPO's response, dated March 1, 2007, stated that the facility as proposed will have no potential effects.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mrs. Angela Marse  
Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

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**IX. PROPOSED PERMIT LIMITS:****Final Effluent Limits:****OUTFALL 001**

The facility is a new discharger into an impaired stream not meeting all of its designated uses. New or expanding discharges in excess of 100,000 gallons per day should have appropriate effluent limitations that prevent impact on the impaired stream. In most cases, facility discharges should be evaluated using an appropriate water quality simulation model. Alternatively, the facility can be permitted using end-of-pipe water quality based effluent limitations. End-of-pipe water quality based effluent limitations are 5mg/l CBOD<sub>5</sub>, 2mg/l ammonia-nitrogen, and 5 mg/l dissolved oxygen. These effluent limits are proposed in the permit due to the impairments of subsegment 040702 discussed in Section V. Receiving Waters especially since the final design capacity for the facility is undetermined (given plans for a regional facility in the future).

A reopener statement has been included in the permit. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL.

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

<b>Effluent Characteristic</b>	<b>Monthly Avg. (lbs./day)</b>	<b>Monthly Avg.</b>	<b>Weekly Avg.</b>	<b>Basis</b>
CBOD <sub>5</sub>	10	5 mg/l	10 mg/l	LDEQ's Pre-TMDL Permitting Strategy and water quality impairments of the receiving stream. (December, 2003)
TSS	10	5 mg/l	10 mg/l	LDEQ's Pre-TMDL Permitting Strategy and water quality impairments of the receiving stream. (December, 2003)
Ammonia-Nitrogen	4	2 mg/l	4 mg/l	LDEQ's Pre-TMDL Permitting Strategy (December, 2003) and water quality impairments of the receiving stream.
Dissolved Oxygen	N/A	5 mg/l	N/A	LDEQ's Pre-TMDL Permitting Strategy (December, 2003) and water quality impairments of the receiving stream.

**\*\*This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.**

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**Other Effluent Limitations:****1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

**X. PREVIOUS PERMITS:**

NPDES Permit No. LA0122611: None issued.

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:****A) Inspections**

No inspections have been performed for this facility.

**B) Compliance and/or Administrative Orders**

No enforcement actions have been administered against this facility.

**C) DMR Review**

No DMRs have been submitted.

**XII. ADDITIONAL INFORMATION:****PERMIT REOPENER CLAUSE**

In accordance with LAC 33:IX.2361.C.3, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

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- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body. The Environmental Protection Agency will be conducting a TMDL in the Lake Pontchartrain Basin Segment 040702. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.240 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.240 \text{ MGD} \times 5 \text{ mg/l} = 10 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.1 and 0.5 MGD.

#### **Compliance Schedule**

In order to meet the sample type and measurement frequency requirements of Part I of the permit, the permittee will need to install a continuous recording device to measure flow. This is standard for facilities of this type and flow. As specified in accordance with the following schedule, the permittee has one year to install such a device:

ACTIVITY	DATE
Installation of a continuous recorder flow measurement device.	Within six months from the effective date of the permit.

Within 14 days of installation, the permittee shall notify the Department of Environmental Quality, Office of Environmental Compliance, Permit Compliance Unit, in writing, that compliance with the requirement has been achieved.

#### **Pretreatment Requirements**

Based upon consultation with LDEQ pretreatment personnel, standard pretreatment language has been included in the permit.

### **XIII**

#### **TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in this Statement of Basis.

### **XIV**

#### **REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy." Louisiana Department of Environmental Quality, 2005.

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Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Bedico Meadows, LLC., Bedico Regional Sewage Treatment Facility, May 19, 2006.

Phone communication dated January 22, 2007.